

REMARKS

In response to the (Final) Office Action mailed July 1, 2004, the Applicant respectfully requests reconsideration.

The Office Action indicates that Figs. 1-4 should be designated by a legend such as – Prior Art--. Applicant has revised Figs. 1-4 to include “Prior Art”. Review and approval of the proposed drawing change is respectfully requested.

Claims 1-3 and 8 were rejected under 35 U.S.C. §103(a) as being unpatentable over Applicant’s admitted prior art (AAPA). Furthermore, claims 4-7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Toyofuku. Applicant respectfully traverses both of these rejections.

The Office Action asserts that, with respect to claim 1, AAPA teaches a monolithic photodetector as recited in claim 1 except that the Office Action admits that AAPA differs from the claimed invention by not showing that the surfaces of the second and third active areas exposed to a lighting are substantially identical. The Office Action goes on to say that “it would have been obvious to one having ordinary skill in the art at the time the invention was made for the surfaces of the second and third active areas exposed to a lighting are substantially identical since they use to receive a lighting.” Applicant respectfully disagrees.

Primarily, the Office Action has not made out a prima facie case of obviousness with respect to claim 1.

As described in the application at page 4, last paragraph, a conventional solution used to avoid the parasitic noise caused by light reaching the second and third active areas includes correcting the parasitic noise by using different amplification gains for the electronic processing of the signals originating from the two photodiodes. As described on page 5, lines 2-7 of the application, another solution includes masking the second and third areas. As noted, both of these conventional solutions are difficult to implement.

Furthermore, the surfaces of the second and third active areas are typically adjusted to the number of components that they contain and typically the number of components in the second active area is different from the number of components in the third active area.

Thus, the conventional solutions discussed in connection with the AAPA include using different amplification gains or masking the second and third active areas. There is clearly no

teaching or suggestion in the AAPA or in any other art of record that parasitic noise can be suppressed by making the surfaces of the second and third active areas exposed to light to be substantially identical thus providing the important advantages of suppressing parasitic noise and allowing the use of the same amplification gain for the electronic processing system of the signals originating from the two photodiodes. Accordingly, claim 1 clearly distinguishes over AAPA and is in allowable condition.

Claims 2-8 depend from claim 1 and are allowable for at least the same reasons. Accordingly, withdrawal of the rejection of claims 1-8 under 35 U.S.C. § 103(a) is respectfully requested.

Claim 9 recites a monolithic photodetector comprising a first active area of doped single-crystal silicon first and second photodiodes having a same surface area as two charge transfer MOS transistors, and as one storage diode; a second active area of doped single-crystal silicon arranged next to a portion of the first active area associated with the second photodiode and including a precharge switch; and a third active doped single-crystal silicon area arranged next to the portion of the first active area associated with the first photodiode and including two read MOS transistors in series; wherein the surfaces of the second and third active areas exposed to light are substantially identical.

As discussed above in connection with claim 1, AAPA clearly does not teach at least the limitation of the surfaces of the second and third active areas that are exposed to light are substantially identical. Accordingly, claim 9 should be in allowable condition.

Claims 10-14 depend from claim 9 and are allowable for at least the same reasons.

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee

occasioned by this response, including an extension fee that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

I hereby certify that this document is being placed in the United States mail with first-class postage attached, addressed to Mail Stop , Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on September 24, 2004.



Attorney Docket No.: S1022/81038US00
X10/01/04

Respectfully submitted,

François Roy, Applicant

By: 

James H. Morris

Reg. No.: 34,681

WOLF, GREENFIELD & SACKS, P.C.

600 Atlantic Avenue

Boston, Massachusetts 02210

Tel. (617) 646-8227

Amendments to the Drawings

“Replacement Sheet(s)” are attached which include a clean version of amended Figs. 1-4. The attached sheets replace the original sheets including Figs. 1-4.

“Annotated Sheets showing changes” are also attached which includes marked-up versions of Figs. 1-4.

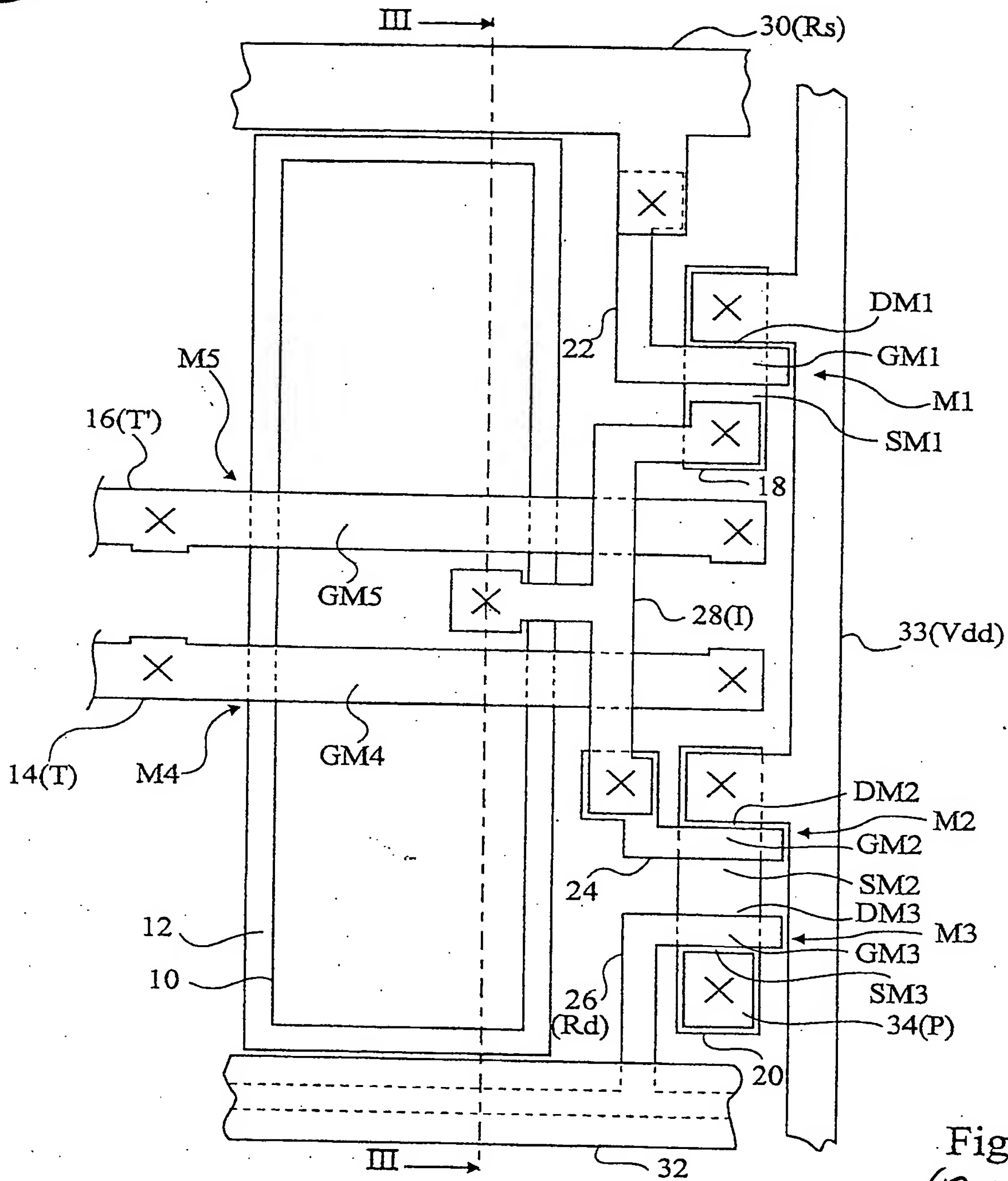
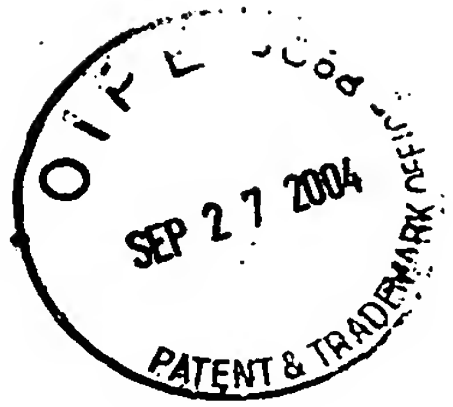


Fig 3
 (PRIOR ART)

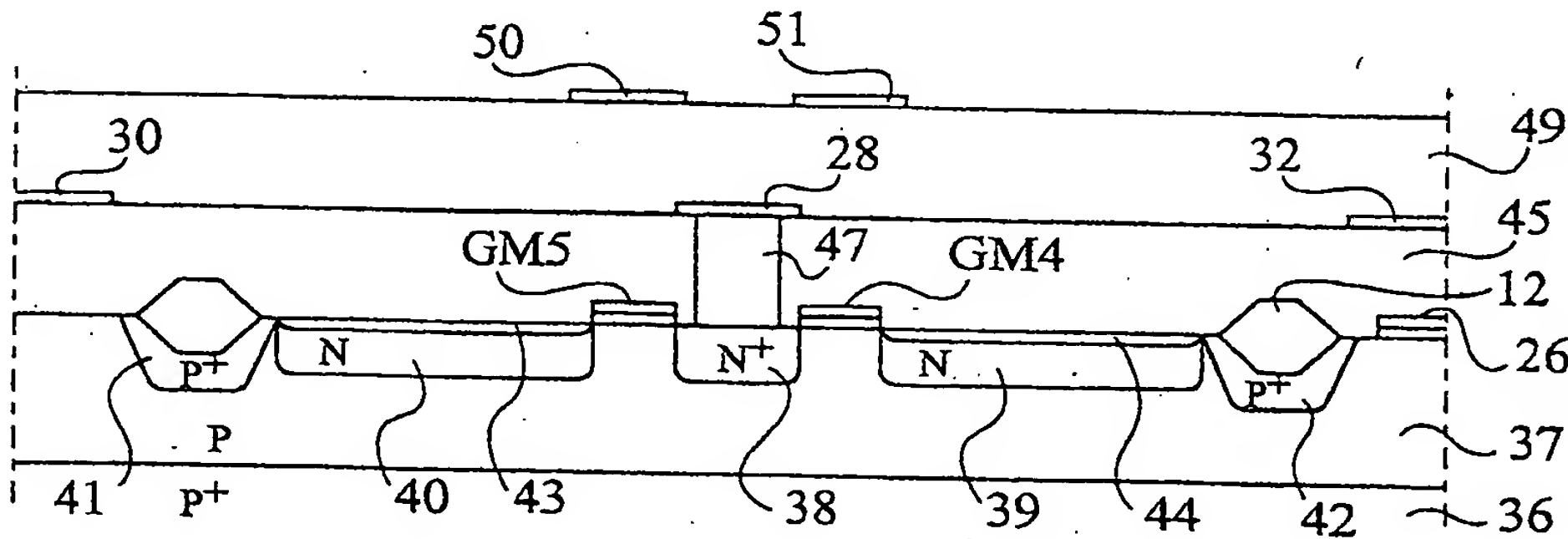


Fig 4
 (PRIOR ART)

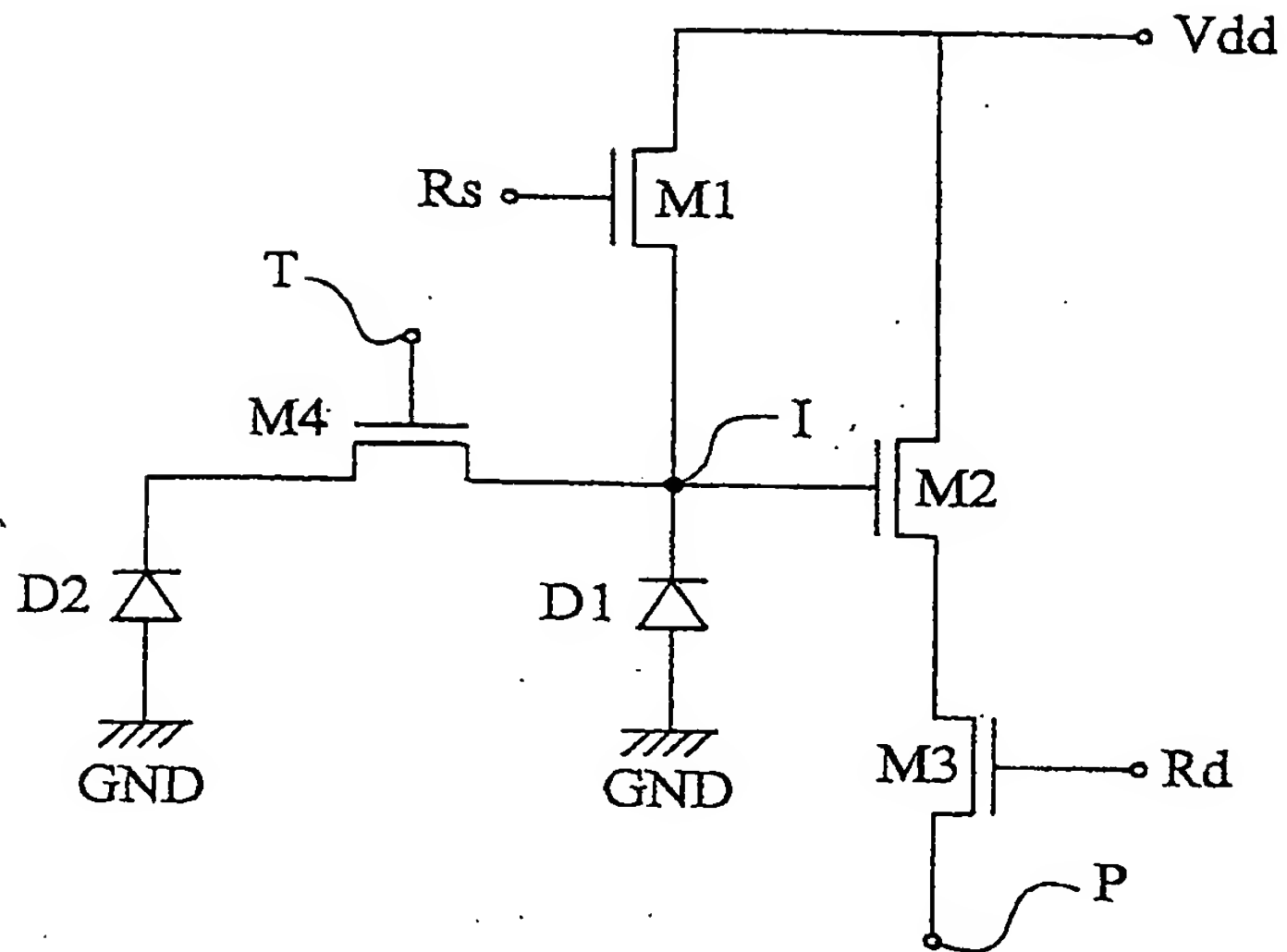
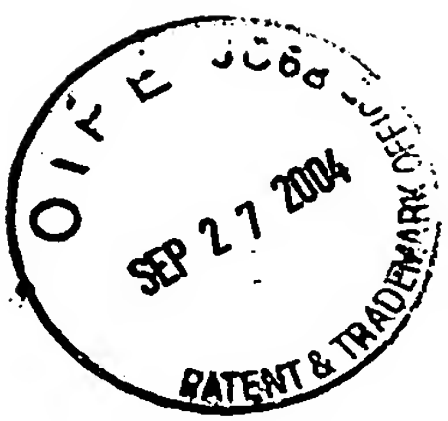


Fig 1
(Prior Art)

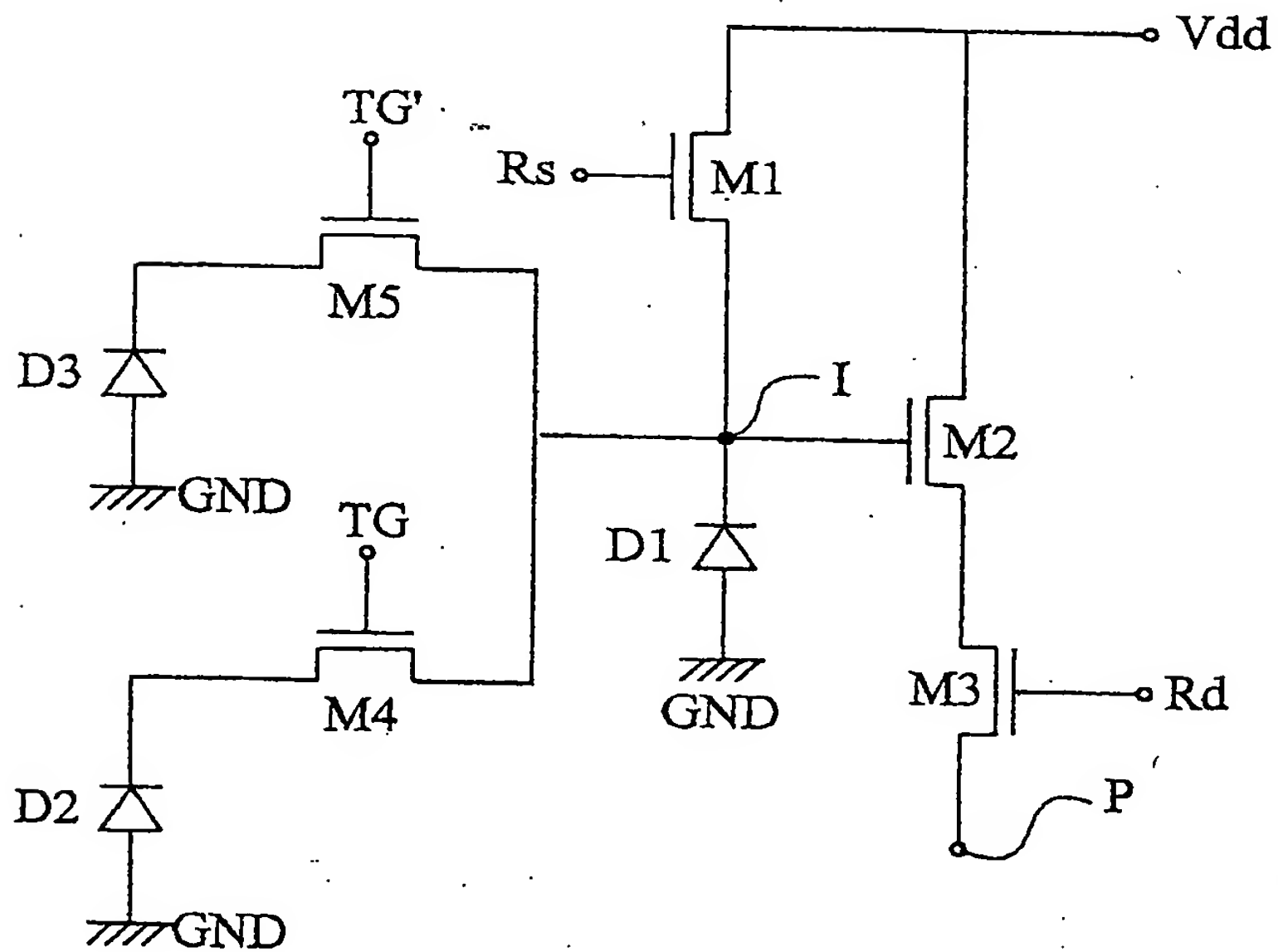


Fig 2
(Prior Art)